Oklahoma State University College of Osteopathic Medicine

Analysis of Awareness Months Using Google Trends

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INTRODUCTION

Public health awareness months have grown dramatically over the past 4 decades as almost 200 awareness days, weeks, and months are currently recognized in the United States.[1] Awareness months (i.e. Breast Cancer Awareness Month) have shown to be successful at implementing educational initiatives and increasing diagnosis rates.[2] Conversely, other studies have displayed that while awareness months have grown they are also providing little benefit.[1] For example, there is a high prevalence of human papillomavirus (HPV) awareness campaigns, yet little available evidence of their effectiveness on vaccine outcomes.[3]

The efficacy of public health awareness months remain unknown, yet it can be assumed that without public awareness, their initiatives may be prone to failure. Here, we investigate public search interest for awareness months around the world.

METHODS

We used Google trends to determine the relative search interest for an awareness month by using related keywords. The data was then analyzed to determine if there was a "spike" in relative search volume for each specific keyword. A "spike" was defined as a keyword with a 25% or greater increase in relative search volume compared to the previous 10 months. If at least half the months over the 10 year period were associated with "spikes" for that specific keyword, the awareness month was considered effective at increasing public awareness for that keyword. Each awareness month was associated with increased public awareness if at least 2 of the 5 related keywords were considered effective. We then reached out to the organizations that sponsor to determine their willingness to provide information about their campaign strategies.

RESULTS

Awareness Events data divided by month and category

A

MONTH	***Percentage of Events that "spiked"***
January	40%
February	25%
March	11.1%
April	33.3%
May	21.4%
June	28.5%
July	60%
August	28.5%
September	37.5%
October	45.4%
November	36.3%
December	100%

B

Awareness Month Groupings	***Percentage of Months that "spiked"***
Cancer Related Months	38.46%
Childhood Disorders	23.08%
Health Promotion/Wellness	36.67%
Women's Health	16.67%
Eye Related Disorders	33.33%
Gastrointestinal Related Disorders	60.00%
Sexually Related Disorders	33.33%
Central Nervous System Related Disorders	44.44%
Cardiac and Blood Related Disorders	14.29%
Other Disorders	30.00%

Figure 1: Breakdown of Awareness Events by Month and Category
[A] Awareness events that caused a "spike" divided up by the month they occurred in. [B] Awareness events that caused a "spike" divided up by the the topic in which they are aiming to raise awareness for.

Response record and overall results of the "spikes"

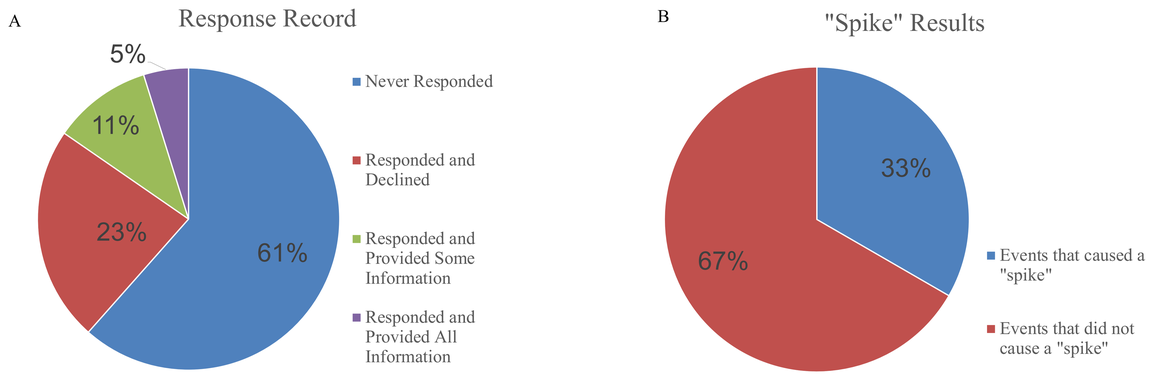

Figure 2: Response Record and Overall Results of the "Spikes"
[A] Breakdown of the information received when reaching out to each sponsor of the awareness events. [B] Results of how many awareness events caused a "spike."

We evaluated 105 national awareness months and found that when classified by month September had the highest number of awareness months with 16 and December had the lowest with only 1. When classified by disease, Health Promotions/Wellness had the highest number of awareness months with 30 and Sexually Related Disorders had the lowest with 3. We found that 33% (35 of 105) of awareness months were associated with a spike. Gastrointestinal Related Disorders classification had the highest percentage of months associated with a spike at 60% (3 of 5) while Cardiac and Blood Related Disorders had the lowest percentage of months associated with a spike at 14.3% (1 of 7). A majority of sponsors did not reply, (61.5%) and that information was not able to be used as a tool for drawing relationships. Overall, there were a majority of awareness months that did not cause an increase in awareness via web trafficking (67.7%).

CONCLUSION

Our results suggest that while some awareness months were successful in increasing awareness for their cause, the majority of campaigns were not contributing to the overall goal of increasing awareness and education about their campaign. We suggest further research into the efficacy of awareness months on disease prevention and the potential conflicts of interest they present.

REFERENCES

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